

THE WEIZMANN SCIENCE PRESS OF ISRAEL

National Council for Research and Development

ISRAFI Journal of MATHEMATICS

Volume 50 1985



מוסד ויצמן לפרסומים במדעי הטבע ובטכנולוגיה, ירושלים THE WEIZMANN SCIENCE PRESS OF ISRAEL

Publishers of the Following Journals

ISRAEL JOURNAL OF BOTANY; ISRAEL JOURNAL OF CHEMISTRY;
ISRAEL JOURNAL OF EARTH-SCIENCES; ISRAEL JOURNAL OF MATHEMATICS;
ISRAEL JOURNAL OF TECHNOLOGY; ISRAEL JOURNAL OF ZOOLOGY;

Journal d'Analyse Mathématique (Science for Youth) כרעת מדע לנוער (Science) ביל עתון מדעי לכל

Supporting Institutions

THE NATIONAL COUNCIL FOR RESEARCH AND DEVELOPMENT;

BAR-ILAN UNIVERSITY; BEN GURION UNIVERSITY OF THE NEGEV;

TECHNION — ISRAEL INSTITUTE OF TECHNOLOGY; TEL AVIV UNIVERSITY;

THE HEBREW UNIVERSITY OF JERUSALEM; THE WEIZMANN INSTITUTE OF SCIENCE

GENERAL EDITORIAL BOARD

ISRAEL JOURNAL OF MATHEMATICS

D. ABIR

A. DVORETZKY

C. ELATA

H. EYAL-GILADI

M. JAMMER

J. JORTNER

E. LENZ

L. REINHOLD

Formerly: Bulletin of The Research Council of Israel, Section F

Editorial Board

H. M. FARKAS
The Hebrew University of Jerusalem
Executive Editor

S. ABARBANEL
Tel Aviv University

Tel Aviv University
S. A. AMITSUR

The Hebrew University of Jerusalem

H. Furstenberg
The Hebrew University of Jerusalem

B. GRÜNBAUM University of Washington

A. LEVY

The Hebrew University of Jerusalem

J. LINDENSTRAUSS

The Hebrew University of Jerusalem

M. MAGIDOR

The Hebrew University of Jerusalem

E. NETANYAHU

Technion - Israel Institute of Technology, Haifa

A. PAZY

The Hebrew University of Jerusalem

B. WEISS

The Hebrew University of Jerusalem

A. ZABRODSKY

The Hebrew University of Jerusalem

Executive Editor

P. GREENBERG

Three volumes of the Israel Journal of Mathematics are to be published in 1985, Vols. 50, 51 and 52

Subscriptions should be addressed to the Weizmann Science Press of Israel, P.O.B. 801, Jerusalem 91007 Israel. Subscription fees per volume, U.S.\$47.00+\$2.00 postage & handling (\$141.00+\$6.00 postage & handling for the 3 vols.). Individual members of mathematical societies may subscribe at a 50% discount.

© 1985 THE WEIZMANN SCIENCE PRESS OF ISRAEL
Typeset & Printed at Ben-Zvi Printing Enterprises Ltd., Jerusalem

ISRAEL JOURNAL OF MATHEMATICS

TABLE OF CONTENTS, VOLUME 50, 1985

ABRAHAM, U. AND S. SHELAH Isomorphism types of Aronszajn trees	75
ADELMAN, O. Brownian motion never increases: a new proof to a	
result of Dvoretzky, Erdös and Kakutani	189
AMIR, D. AND V. D. MILMAN A quantitative finite-dimensional	
Krivine theorem	1
AMITSUR, S. A. See JP. Tignol	
ARNOUX, P., D. S. ORNSTEIN AND B. WEISS Cutting and stacking,	
interval exchanges and geometric models	160
DEKSTER, B. V. An extension of Jung's theorem	169
DI BLASIO, G., K. KUNISCH AND E. SINESTRARI Stability for abstract	
linear functional differential equations	231
GORDON, Y. Some inequalities for Gaussian processes and applica-	
tions	265
HARAN, D. Non-free torsion-free profinite groups with open free	
subgroups	350
KAMIN, S. AND L. A. PELETIER Source-type solutions of degenerate	
diffusion equations with absorption	219
Kaufman, R. On some operators in c_0	353
KÖNIG, H. Spaces with large projection constants	181
KOPPEL, M. Towards a new theory of confirmation	207
Kunisch, K. See G. Di Blasio	
LEDOUX, M. Sur une inégalité de H. P. Rosenthal et le théorème	
limite central dans les espaces de Banach	290
LEDRAPPIER, F. Poisson boundaries of discrete groups of matrices	319
MILMAN, V. D. See D. Amir	
MORAN, G. The products of conjugacy classes in some infinite simple	
groups	54
ORNSTEIN, D. S. See P. Arnoux	
PELETIER, L. A. See S. Kamin	
RAISONNIER, J. AND J. STERN The strength of measurability hypotheses	337

Shelah, S. See U. Abraham	
SINESTRARI, E. See G. Di Blasio	
SPIVACK, M. Derivations and nest algebras on Banach space	193
Stern, J. See J. Raisonnier	
STERNFELD, Y. Dimension, superposition of functions and separation	
of points, in compact metric spaces	13
TIGNOL, JP. AND S. A. AMITSUR Kummer subfields of Malcev-	
Neumann division algebras	114
WEISS, B. See P. Arnoux	
YAMASHITA, S. An extremal problem for Dirichlet-finite holomorphic	

145

201

SCHMERL, J. H. Models of Peano Arithmetic and a question of

Sikorski on ordered fields

functions on Riemann surfaces